



## University of the Pacific Scholarly Commons

---

University of the Pacific Theses and  
Dissertations

Graduate School

---

2013

# Exploring motivation through athlete communication

Tye G. Davis  
*University of the Pacific*

Follow this and additional works at: [https://scholarlycommons.pacific.edu/uop\\_etds](https://scholarlycommons.pacific.edu/uop_etds)



Part of the [Communication Commons](#)

---

### Recommended Citation

Davis, Tye G.. (2013). *Exploring motivation through athlete communication*. University of the Pacific, Thesis. [https://scholarlycommons.pacific.edu/uop\\_etds/206](https://scholarlycommons.pacific.edu/uop_etds/206)

This Thesis is brought to you for free and open access by the Graduate School at Scholarly Commons. It has been accepted for inclusion in University of the Pacific Theses and Dissertations by an authorized administrator of Scholarly Commons. For more information, please contact [mgibney@pacific.edu](mailto:mgibney@pacific.edu).

EXPLORING MOTIVATION THROUGH ATHLETE COMMUNICATION

by

Tye G. Davis

A Thesis Submitted to the  
Office of Research and Graduate Studies

In Partial Fulfillment of the  
Requirements for the Degree of

MASTER OF ARTS

College of the Pacific  
Communications-  
Media and Public Relations

University of the Pacific  
Stockton, CA

2013

EXPLORING MOTIVATION THROUGH ATHLETE COMMUNICATION

by

Tye G. Davis

APPROVED BY:

Thesis Advisor: Heather Hether, Ph.D

Committee Member: Teresa Bergman, Ph.D.

Committee Member: Qingwen Dong, Ph.D.

Department Chair: Qingwen Dong, Ph.D.

Interim Dean of Graduate Studies: Bhaskara R. Jasti, Ph.D.

EXPLORING MOTIVATION THROUGH ATHLETE COMMUNICATION

Copyright 2013

by

Tye G. Davis

## DEDICATION

This thesis is dedicated to Jeff & Julie Davis in honor of all they have sacrificed to ensure their children were given the opportunity to excel in life. Their encouragement and support has been the inspiration for where I am today.

## ACKNOWLEDGMENTS

My gratitude goes to the University of the Pacific Communication Department Faculty who have been inspirational and caring during my time as a graduate student. Their guidance and insight has prepared me for my future career and given me new perspective on life. Thank you for providing me with the opportunity to further my education through your teachings.

## Exploring Motivation through Athlete Communication

### Abstract

by Tye G. Davis

University of the Pacific  
2013

The current study examined the communication ecology of athlete motivation. Furthermore, gender differences in communication ecologies were evaluated, as were variations in communication tendencies for highly and lowly motivated athletes. Findings suggest that teammates and parents are strong motivators for athletes. Mass media were associated with athlete motivation while social media were not. Gender differences were found with males reporting being more motivated by mass media than females, while females were more strongly motivated by their parents and friends. There were significant differences found in the communication ecologies of highly motivated athletes compared to less motivated athletes. Athletes who were highly motivated communicated more often with interpersonal sources than did less motivated athletes. Implications of the findings and directions for future research are discussed.

## TABLE OF CONTENTS

LIST OF TABLES .....	8
LIST OF FIGURES .....	9
CHAPTER	
1. Introduction.....	10
Definition of Key Terms.....	11
2. Review of the Literature.....	13
The Ecology of Communication.....	13
Motivation.....	15
Gender Differences in Motivation.....	16
Interpersonal Sources of Motivation.....	17
Media Sources of Motivation.....	21
Communication Tools.....	24
3. Methodology .....	29
Procedures .....	29
Measures .....	30
Analysis .....	32
4. Results.....	33
Athlete Motivation.....	33
Gender Differences.....	36
Highly versus Lowly Motivated Athletes.....	38
Communication Tools.....	39
5. Discussion .....	41
Implications.....	44
Limitations.....	45
Conclusion and Directions for Future Research.....	45
REFERENCES .....	47
APPENDICES	
A. ATHLETE MOTIVATION QUESTIONNAIRE.....	56



## LIST OF TABLES

Table	Page
1. Comparison of Mass Media Motivation on Gender .....	37
2. Comparison of Motivation on Gender .....	38
3. Significant Differences of Athlete Communication Tool Usage by High versus Low Motivation Across Interpersonal Connections .....	39

## LIST OF FIGURES

Figure	Page
1. Motivational Impact of Interpersonal Sources.....	34
2. Sport Motivation Scale of Interpersonal Sources .....	35
3. Motivational Impact of Media .....	36
4. Communication Methods used with Interpersonal Sources.....	40

## **Chapter 1: Introduction**

Numerous studies have documented the communication systems or ecologies whereby people connect with individuals and communication media with intentions of accomplishing everyday life goals (Altheide, 1994; Ball-Rokeach, 2007; Turner, Qvarfordt, Biehl, Golovchinsky, Back, 2010). In addition, many studies have shown how communication ecology works in various settings (i.e. workplace, communities, etc.) (Ball-Rokeach, 2007; Altheide, 1998; Turner, Qvarfordt, Biehl, Golovchinsky, Back, 2010). While there is a growing body of research related to communication ecology, this theory has not yet been applied to a sports context, which is the focus of this thesis. This thesis seeks to characterize the current communication ecologies that athletes assemble to motivate themselves and support their performance goals. Mapping athletes' communication ecologies can help athletic departments create a supportive environment for athletes and help them better understand why particular tools in an athlete's ecology are identified as motivators. Therefore, this study investigates the communication ecologies whereby athletes establish connections to interpersonal sources for purposes of attaining their athletic performance goals. It also examines how sports-related mass and social media impact athlete motivation through parasocial interaction and interpersonal connections. This study measured which motivational sources and which communication channels are most important to athlete communication ecologies and the achievement of athletic goals.

## **Definition of Key Terms**

**Ecology of Communication-** Ball-Rokeach et al. (2007) defines the ecology of communication as “people developing their own communication systems or ecologies whereby they establish connections to other people and to the media for purposes of attaining everyday life goals” (p. 4). Individuals seek a motivational climate that is best fitting for their needs and wants; the ecology of communication identifies what channels people rely on most to achieve their goals. Communication ecology is a theory that recognizes the importance of many different communication channels. It does not look at one channel at a time, but rather, takes on a structural approach and seeks to conceptualize a communication environment.

**Motivation-** Defined as a psychological feature that arouses an organism to act towards a desired goal and elicits, controls, and sustains certain goal directed behaviors (Huitt 2011; p. 6). It can be considered a driving force, a psychological drive that compels or reinforces an action toward a desired goal. Two basic types of motivation are typically identified: intrinsic and extrinsic motivation. Intrinsic motivation refers to doing something inherently interesting or enjoyable and extrinsic motivation refers to the performance of an activity in order to attain an outcome (e.g. money or grades) (Deci & Ryan, 2000).

**Desirable motivation patterns-** patterns of motivation that result in more adaptive behaviors, higher level of sportsmanship and higher achievement (Joesaar, Hein, & Hagger, 2012).

**Coach profiles-** different leadership styles in which coaches choose to lead their respective teams, including autocratic and democratic (Baric & Bucik. 2009). The democratic coach is more supportive, more instructive and more ready to reinforce, encourage and give positive feedback information to their athletes (Chelladurai, 1990; Reimer & Toon, 2001). Autocratic coaches are more oriented towards task accomplishment and outcome than towards people; they are highly oriented towards results and winning (Chelladurai, 1990; Reimer & Toon, 2001).

**Task orientation-** refers to a person who is more concerned with performing a task efficiently and effectively than in communicating successfully with the person in charge (Baric & Bucik. 2009).

**Ego orientation-** refers to a person who is more concerned with success in terms of exceeding the performance of others (Baric & Bucik. 2009).

**Social support-** the perception and actuality that a person is cared for, has assistance available from other people, and that person is part of a supportive social network (Joesaar, Hein, Hagger. 2012).

## **Chapter 2: Review of Literature**

### **The Ecology of Communication**

Effective communication allows individuals to share ideas, build common ground, and develop complex interpersonal relationships (Turner et al., 2010). The makeup of effective communication can be seen through an individual's communication ecology. Ball-Rokeach et al. (2007) defined communication ecologies as "...people developing their own communication systems or ecologies whereby they establish connections to other people and to media for purposes of attaining everyday life goals" (p.4). In order to accomplish their goals, people often connect to more than one communication option. Ball-Rokeach et al. (2007) found that a person's communication ecology is "dynamically responsive to the particular goal or goals at issue" (p. 4). For example, athletes will construct different ecologies when they're trying to accomplish their goals with their sports team as compared to trying to achieve academic success.

The communication ecology approach identifies an individual's most preferred communication channels. Communication ecology allows for a better understanding of how to effectively communicate information via the best channels available. Ball-Rokeach et al. (2007) explained the advantages of employing a communication ecology approach and found that "appropriate utilization of the most important communication connection to reach people maximizes the likelihood of effectiveness" (Ball-Rokeach et al., p. 14). For example, if athletes have established practices of preferring one

communication channel as the most important way they get motivation, they are more likely to systematically process information that is obtained via that channel (Ball-Rokeach, 2007).

In Hearn and Foth's (2007) model of communicative ecologies, three layers of communicative ecology were described:

1. A technological layer which consists of the devices and connecting media that enable communication and interaction;
2. A social layer, which consists of people and social modes of organizing these people; and
3. A discursive layer, which is the content of the communication, that is the ideas or themes that constitute the known social universe that ecology operates in.

Studies of communication ecology identify and study the people and communication habits of communities and groups. Examples of these groups range from small families and clubs to large organizations such as governments and multi-national businesses (Allison, 2007). McDermott and Schneider (2002) define these communities as:

...groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis...As they spend time together, they typically share information, insight, and advice... They discuss their situations, their aspirations, and their needs (p. 5).

Hearn and Foth (2007) studied the social networks of residents in three inner-city apartment buildings in Australia and found that the interpretation of communication

ecology can be best described using three layers: technical, social and discursive. Based on their findings, these researchers suggest that it is imperative to utilize a holistic approach to communication that recognizes the importance of inter-relationships between different communication methods and between different social dimensions. In other words, communication ecology theory recognizes the various communication methods between different social groups.

Turner et al. (2010) examined communication ecology in the workplace and noted that collaboration relies heavily on effective communication among people. Many communication tools (email, Twitter, Facebook) have become increasingly available and accepted in modern communications (Turner et al., 2010). These researchers explained that technology enables collaborators to “foster ideas, to build common ground, and to develop complex interpersonal relationships” (Turner et al., 2010, p. 31). With the availability of old and new communication channels, people are building their own ecologies of communication technologies, with each channel fulfilling a specific role, allowing different expression or providing a critical service (Turner et al., 2010). The peer-to-peer use of communication technologies that include phones, social media, and text messaging in combination with face-to-face interaction gives rise to a communicative ecology of college athletes’.

## **Motivation**

In the context of sport and exercise, motivation as a general psychological concept has been researched extensively and systematically for over three decades. Most of this research has applied theoretical frameworks such as achievement goal theory (e.g.,



Duda, 2001), self-determination theory (e.g., Frederick & Ryan, 1995), and the hierarchical model of intrinsic and extrinsic motivation (e.g., Mageau & Vallerand, 2003) to investigate motivational issues concerning mainly young sport participants. Although studies have considered coaches' behaviors to be one of the most important for sports participation (Mageau & Vallerand, 2003), it is just one of the interpersonal sources that motivate athletes. In athletic environments, studies have shown that "athletes' beliefs and perceptions regarding social agents, like coaches and peers, influence athletes' various motivational outcomes" (Keegan, Harwood, Spray, & Lavalley, 2009, p. 21).

Previous research on sport motivation has shown that American college athletes develop competitive motives for sport participation, with males generally expressing a greater competitive motive than females (Sage, 1980). In addition to competition, other motives for sport participation, such as fitness and social motives are also claimed to be of importance among American college students and athletes (Mathes & Battista, 1985). Previous research on sport motivation has sought to explain differences in sport motivation between persons based on such variables as age, level of skill, and gender. With gender playing an important role in college athletics, it's important to consider how the different communication ecologies of each gender may be associated with motivation.

### **Gender Differences in Motivation**

Gender differences in motivation have been discussed by many researchers. Much of the research has investigated how men and women are motivated differently in the workplace. More specifically, this research suggests that gender role stereotypes motivate men and women (Kepuladze, 2010). Hofstede (2001) concluded that while

“men’s concerns are mostly earnings, promotion and responsibility, women value a friendly atmosphere and usually concern prestige, challenge, task significance, job security, co-operations and their work conditions” (p. 62). Moreover, Kepuladze (2010) adds that “gender stereotypes influence men’s and women’s achievements and goal orientations” (p. 123).

In the sports context, studies have found gender differences with athletes’ preferences in the leadership behavior of coaches. Male athletes expected more autocratic relationships than did female athletes (Chelladurai, 1978; Terry, 1984; Terry & Howe, 1984). Female athletes preferred to be more involved in decision-making (e.g. democratic coaching style) than did male athletes (Chelladurai, 1978; Chelladurai & Arnott, 1985; Chelladurai, Haggerty & Baxter, 1989). A study by Beam et al. (2004) showed that intercollegiate male athletes showed significantly greater preference for autocratic coaching style and motivational support than female athletes. However, female athletes showed significantly greater preferences for training and instruction (e.g. task-orientation). Athletes are motivated by those people who are relatively important within their social networks. The following section discusses the social aspects of motivation and support in the communication ecology of the athletic environment.

### **Interpersonal Sources of Motivation**

**The Coach.** In the context of sports, coaches vary with regard to their motivational pattern (i.e. coaching experience, age, educational level, leadership style, etc.) and their motivational attitude toward their athletes. Motivational differences may be related to differences in coaches’ interpersonal styles (democratic and autocratic), as

these interpersonal styles are important factors of athletes' intrinsic motivation and self-esteem (Vallerand & Pelletier, 1985).

A coach's motivational pattern could have an impact on his/her leadership behavior, which can cause differences in the prevalence of particular types of motivation in athletes. Regarding the athletes' goal choices, the domination of a particular motivational pattern in the team can influence athletes' experience of their coach (Vallerand & Perreault, 1999). Vazou (2006) explains that to attain coaches' approval, athletes often behave in ways that are consistent with coaches' expectations. For example, a coach who employs a less controlling leadership style allows their athletes to participate in the decision-making process and encourages them to solve some problems by themselves that may appear during practice or competition.

Previous research has identified the desirable characteristics of the ideal credible coach. These coaches have a broader definition of success than winning and losing (Duda & Balaguer, 2007); they are charismatic and they behave in a way that their athletes respect. This style is used so that athletes achieve higher goals, show improvement, prove themselves in competition and win. They encourage their athletes to depend on themselves rather than be compliant and controlled by their coaches (Baric & Bucik, 2009). These coaches develop an environment where athletes can recover quickly from a loss, considering it as a challenge rather than a failure. Such coaches, "because they coach with both, heart and head contribute to the development of athletes who are intrinsically motivated, committed and confident (Duda & Balaguer, 2007, p. 118). Chelladurai (1990) explains a "coach's social interaction consists of several different processes like his/her instructiveness, supportiveness, and rewarding behavior" (p. 221).

The social interaction and support is the basis of motivating an athlete. A coach's supportiveness is his/her readiness to give social support to athletes (Baric & Bucik, 2009). When the coach shows regard toward the athletes' well-being, he/she creates a positive group atmosphere and establishes warm interpersonal relationships with athletes (Jowett & Chaundy, 2004). In addition to coaches, parents play important roles within the athlete's interpersonal relationships.

**The Parent.** Studies of programs in early childhood, elementary, middle, and high schools indicate that efforts to improve student outcomes are more effective when the family is actively involved (Henderson & Berla, 1994). Compared with the support children receive from teachers and peers, the role parents play in children's learning is often considered not only unique but also essential (e.g., Furrer & Skinner, 2003; Grolnick & Ryan, 1992). Although parent-oriented motivation may be experienced by children largely as forced, it may provide them with purpose in the academic context that fosters their engagement, thereby contributing to their achievement (Pomerantz & Portillo, 2012).

Prior research has shown that "many beliefs, values, and success criteria of significant others such as parents can influence athletes' participation and motivation in sports" (Collins & Barber, 2005; p. 22). Moreover, research has found that children's goal orientations are significantly related to those of their parents (Duda & Hom, 1993). Children's valuation of parents' expectations of them influence the intrinsic motivation of the participants when engaged in sports, and the belief the child holds about what is valued in a certain achievement context (Collins & Barber, 2005). Often, parents offer 'unconditional praise' as a positive influence on motivation and the parent-child

relationship (Keegan et al. 2010). Throughout sports competition from early childhood to college, athletes form many relationships with their teammates that play an important role in their communication ecology.

**The Teammate.** Within the athletic environment, interactions with teammates are important to the psychosocial experiences of athletes (Bianco & Eklund, 2001). Such interactions have potential to shape perceptions of support availability and generate positive motivational outcomes. The common factors of an athletic team such as improvement, cooperation, equal treatment, social support, and effort all represent a motivational climate in which teammates share. Positive friendship behaviors, such as companionship and supportiveness, generate an environment in which athletes can look to one another for motivation. Described as one of the most studied social constructs of recent decades (Goldsmith, 2004), social support refers to social interactions aimed at inducing positive outcomes (Bianco & Eklund, 2001). Within the social context of sport, social interactions have the potential to shape perceptions of support availability and received support. Support from teammates may be especially salient in collegiate sport because athletes are typically living away from their family homes, balancing substantial academic requirements with their sport obligations, and competing in a highly demanding and competitive sport environment (Gould & Whitley, 2009). Deci and Ryan (2000) state that “social environments created by significant others that promote a sense of choice and self-mastery tends to nurture intrinsic motivation” (p. 182). In addition to social environments created by teammates, athletes’ friends play an important role within their interpersonal relationships.

**The Friend.** From early childhood, friends serve as functions of social comparison, self-evaluation, and co-learning (Vieria & Grantham, 2009). Older children use social comparison to evaluate how well they are doing compared to peers, especially since they may not have sufficient experience with the task. During their early adolescent ages, children are similar in the extent to which they make internal and external blame attributions, and also in their angry and sad reactions to negative events that befall them (Vieria & Grantham, 2009). Children with similar values tend to reinforce each other through modeling support, sharing of resources, and clarifying tasks for one another (Eccles, Wigfield, & Schiefele, 1998). Friends spend much of their time together and develop similar expectations and/or assumptions about one another's behaviors than other peers' behaviors over time via peer influence processes (Laursen et al., 2012). As young adults, friends become more similar in self-schema over time, likely because individuals tend to revise their own perspectives with information offered by their friends (Deutsch & Mackesy, 1985). They seek support continually from those individuals who they feel offer support and motivation congruent with their own perspectives. In addition to interpersonal sources, athletes may get motivated from other sources such as traditional and new media.

### **Media Sources of Motivation**

**Mass Media.** Mass media, which includes television, print, and radio, distribute entertainment and information that reaches large numbers of people with unprecedented speed and efficiency. Parasocial interaction has become an increasingly common phenomenon during the latter half of the 20<sup>th</sup> century, as it was coupled with the growth in popularity of mass media (Ashe, 2001). Originally termed by Horton and Wohl

(1956), the term parasocial relationship describes a relationship between a media character and an audience member. Parasocial relationships are one-sided interpersonal relationships that “television viewers establish with media characters” (Rubin & McHugh, 1987, p. 280), allowing viewers to perceive a special connection with media characters (Eyal & Cohen, 2006). The existence of parasocial relationships has been found to depend on the media character’s looks, behavior, humor, speech characteristics, emotional state, and nonverbal behavior (Hoffner, 1996).

Previous research has explored audiences’ relationships with professional sports athletes (e.g. Brown, Basil, & Bocarnea, 2003). As media coverage of sports is constantly expanding, more audience members are exposed to professional athletes. Public knowledge of athletes’ personal lives is greater today than it has ever been in history (Brown, Basil, & Bocarnea, 2003). Brown et al. (2003) described how “news of professional athletes, their activities, their spoken words, and their lifestyles provide a means of social influence to large numbers of people” (p. 6). Studying the influence of famous athletes on health behaviors, Brown et al. (2003) added that “one of the effects of mass exposure to the lives of sports celebrities occurs when media consumers seek role models in the athlete they admire.” When college athletes seek role models in sports celebrities, they likely undergo what Bandura (1977) called vicarious learning, which is part of social cognitive theory. Vicarious learning refers to “human behavior learned observationally through modeling: from observing others one forms an idea of how new behaviors are performed, and on later occasions this coded information serves as a guide for action” (Bandura, 1977, p. 193). When college athletes perceive their role models as having the lifestyle and success they want, they are likely to emulate sport celebrity

behaviors. By emulating the behavior, it motivates athletes who are seeking that lifestyle and sports success to work towards their athletic goals. Mass media are overwhelmingly present in today's society and can significantly impact motivation amongst athletes through parasocial relationships. Social media have allowed more two-way communication to take place amongst web users, and they have created a new community for collaboration amongst peers.

**Social Media.** Social media are the means of interactions among people in which they create, share, and exchange information and ideas in virtual communications and networks (Ross et al., 2009). Social media allow consumers to interact easily with each other and with commercial entities (Mangold & Faulds, 2009). Moreover, social media can be both a source of motivation and also a communication tool or channel. Social networking websites allow their users to find individuals with similar interests for social and emotional purposes (Ross et al., 2009). Social networking is a current phenomenon that consists of Internet-based communication available through websites (e.g Facebook, Twitter, YouTube) that has become popular especially among adolescents and young adults. These activities occur among people who already know each other personally as well as those who have never met in person. Social networking websites provides a virtual place to spend time and share thoughts and objects with personal meaning, such as pictures, and remain closely connected with friends regardless of geographic distance (Hinduja & Patchin, 2008).

In a study of Facebook, Sheldon, Abad, & Hirsch (2011) found Facebook allows users to fulfill belonging needs through communicating with and learning about others. Facebook can be an effective method for coping with feelings of social disconnection as



it enables peer acceptance and relationship development (Yu, Tian, Vogel, & Kwok, 2010) and boosts self-esteem (Gonzales & Hancock, 2011; Steinfield et al., 2008).

Facebook is also used for self-presentation, where individuals attempt to influence the perceptions of other people about a person, object, or idea. Facebook activities that accomplish self-presentational goals include posting photographs, profile information, and wall content (Zhao, Grasmuck, & Martin, 2008). College athletes use social media for interpersonal communication that can influence their participation and motivation in sports (Stefanone et. al, 2010). Along with social media, college athletes use other various communication tools that contribute towards their communication ecology.

### **Communication Tools**

In communication ecology, athletes rely on communication tools that facilitate motivational communication. Athletic communication ecology is inherently collaborative, and this collaboration relies on effective communication amongst coaches, teammates, officials, athletic trainers and many more affiliated personnel. Hearn and Foth (2007) suggested that “within the conceptual framework of communicative ecology, the technology layer provides the foundation for mediated communication to occur in addition to conventional face-to-face interaction” (p. 10). Castells (2001) talked of ‘portfolios of sociability’ to describe the interwoven networks of kinship, friends and peers that people create. Mesch and Levanon (2003) found that these social circles, which individuals generate and maintain with the help of information and communication technology, transcend from online to offline and from offline to online environments seamlessly. New media (email, social media, text messaging) provide a persistent record of messages, but do not convey non-verbal signals, while face-to-face conveys non-

verbal signals, but does not provide a persistent record of messages. As Turner (2010) explained “face-to-face communication provides a wealth of information about the communicating parties, gleaned from facial expressions, body language, verbal pauses, and other sources, but generally leaves an imperfect trace (in participants’ memories) of exactly what was said.” Face-to-face communication provides satisfaction and pleasure that mediated communication may not provide.

Young adults are particularly likely to use communication technologies to maintain contact with friends and family (Pew Research Center, 2010). A study by Auter (2007) explored cell phone usage amongst university students and found that cell phones were especially gratifying to users who were seeking affection, inclusion, and situational control. Participants used the phone to facilitate interpersonal communication especially as a functional alternative when they were uncomfortable communicating face-to-face (Auter, 2007). In 2012, 96% of young adults aged 18-24 years-old owned cell phones. In the same year, 97% of young adults used texting and 45% used the internet on their phone (Pew Research, 2012). People are using cell phones because they provide immediate access, regardless of time and location, to find information, and for status, mobility, and accessibility (Jin & Park, 2010). Valkenburg and Peter’s (2010) research suggested that many young adults use internet communication applications like chat, instant messaging, and social networking sites to reinforce existing relationships rather than to meet new people. Research shows that young adults use social networking sites to fulfill the developmental task of connecting with others and bridging their online and offline social worlds (Jin & Park, 2010). Moreover, Regan and Steeves (2010) suggest that the benefits of online social networking may include “empowerment among young

people on personal, interpersonal, and community levels” (p. 262). In a recent study by Pew Research Center (2012), women used social networking sites in greater proportions than did men: 75% versus 63%, suggesting that there are gender differences in how individuals use these sites (Pew Research, 2012). Gender differences in communication play important roles in motivational communication.

Throughout the life-cycle, women generally have closer friends than men (Greenglass, 1982; Verbrugge, 1987). Commencing in childhood, girls tend to develop more intimate interpersonal relationships than boys, while boys tend to congregate together in larger groups (Bell, 1981). Older women still have a greater number of close relationships and also seemingly more extensive social networks than men (Bell, 1981; Maccoby, 1966; Wheeler, 1977). Additionally, women provide more emotional support to both men and women, and they get more help in return (Lairreiter, 1992). Explanations for such discrepancies typically focus on gender differences in emotional expressiveness. Women emphasize intimacy and self-disclosure in their friendships and are generally more empathetic, expressive, and disclosing than men (Kessler, 1985). In short, females seem to invest more of themselves in the lives of their family members and friends than do males. Since women cultivate such close, personal relationships with their friends and family, this may suggest that these connections play an important role in female athletic motivation.

This study examines sport motivation from interpersonal and media sources through the evaluation of the athlete communication ecology. Moreover, this study considers the three layers of communicative ecology as described earlier by Hearn and Foth (2007) and measures the impact of technological, social and discursive levels on

motivation. This study also seeks to understand the role of new media in athlete motivation. The popularity of new media suggests they have become important communication tools that facilitate social support. Additionally, this study seeks to analyze gender difference in sport motivation by comparing previous research findings of discrepancies between gender emotional expressiveness through sports. These considerations led to the following research questions:

Research Question 1: What interpersonal communication sources are most influential for student athletes' motivation in sports?

Research Question 2: What mediated communication sources are most influential for student athletes' motivation in sports?

Research Question 3: Is there a gender difference in mediated communication influences for student athletes' motivation in sports?

Research Question 4: Which communication tools are more frequently used by athletes for motivational support with their interpersonal sources?

The study also tests three hypotheses:

Hypothesis 1: Female athletes rely more on their intimate relationships than male athletes for motivational support.

Hypothesis 2: Male athletes rely more on their coaches than females for motivational support.

Motivational communication was further analyzed by comparing highly and lowly motivated athletes. Since communication is an important part of the athletic experience, it is proposed that:

Hypothesis 3: Highly motivated athletes use communication tools more often for motivational support with their interpersonal sources than less motivated athletes.

## **Chapter 3: Methodology**

### **Procedures**

Participants for the study were student-athletes enrolled at the University of the Pacific. The University of the Pacific consists of 18 Division One NCAA sanctioned sport teams with total team roster spots ranging from 7-35 persons. There are 11 women's and 7 men's sports teams that include the following: volleyball, baseball, basketball, soccer, water polo, cross country running, golf, softball, swimming, field hockey, tennis, and track. A survey was administered to student-athletes at the end of the 2012-2013 school year. All survey instruments and procedures were reviewed and approved by the university Institutional Review Board. Prior to administering the survey, the governing coaches of each team were contacted in order to explain the objectives of the study. They were informed of the instruments that would be used and that it would be voluntary for their athletes to participate. After approval was obtained from the coaches, the survey was administered over a two-week period during meetings held with the student-athletes at the University of the Pacific athletic conference room. Meetings were held six times over the two weeks to accommodate the athletes' class and practice schedules. A variety of athletes from different sports teams participated in each meeting. Following verbal instruction of the survey procedures, and after obtaining the athletes' consent to participate, athletes voluntarily completed the questionnaire individually. The questionnaire consisted of five sections with a total of one-hundred and two questions.

The questionnaire took athletes approximately 15-20 minutes to complete. One-hundred and twenty-five surveys were distributed and 110 were completed, resulting in a 88% response rate.

## **Measures**

**Media Motivational Sources.** The impact of mass media on motivation was measured using a six-item scale. Respondents were asked how important each mass medium was in motivating their athletic performance. Items included sports-related web sites, phone applications (i.e. “apps”), television, radio, video games, and magazines. Participants rated their agreement on a five-point scale anchored by “not at all” (1) and “very much” (5). Respondents’ social media participation was also measured with a five-point Likert scale anchored by “completely disagree” (1) to “completely agree” (5), with higher scores reflecting greater motivation. The social media section measured Facebook, Twitter and YouTube participation and motivation. An example item is “If I need motivation for my sport, I look to professional athletes on Facebook.” Items measuring Facebook, Twitter and YouTube all used similar wording.

**Interpersonal Motivational Sources.** Respondents were presented with a series of questions assessing how much specific interpersonal sources in their lives motivate them. The athletes were asked how much they agreed or disagreed with items based on the root question: “How important is each of the following in motivating you?” The interpersonal sources were coaches, parents, teammates and friends. Participants rated their agreement on five-point scales anchored by “not at all” (1) and “very much” (5).

This scale was a general measurement of interpersonal sources and it was contrasted with the sports motivation scale.

The sports motivation scale was used to evaluate the effects of interpersonal sources more specifically on sport motivation. The nine-item scale was a modified version of the Sports Motivation Scale (Pelletier et al., 1995). Situational statements were presented to participants and they were asked to rate their agreement on a five-point Likert scale anchored by “completely disagree” (1) and “completely agree” (5). With each statement, the participant rated their level of agreement based on the motivational impact of the corresponding interpersonal source (coach, parents, teammates, and friends (who are non-teammates)). This allowed for a more in-depth measurement of motivation specifically related to sports. This scale included the questions “If I play poor in a game I talk to...”, “When I’m upset with my team’s performance, I talk to...”, “When I play great in a game, I tell...”, “When I become exhausted from my sport, I talk to...”, “If I have a concern with a coach, I talk to...”, “If I have difficulty with my sport, talking to...”, “Playing sports is one of the best ways to maintain a relationship with...”, “Sports allow me to be well regarded by...”, and “If I need advice on how to improve my sports skills, I ask...” Items from the nine-item scale were combined into composite variables. One composite variable was created for each interpersonal source by averaging the responses to the related items (i.e. adding the individual items together and dividing by the total number of items). All of these scale variables had strong reliability as indicated by Cronbach’s alpha: Parents ( $\alpha=.80$ ), coaches ( $\alpha=.79$ ), friends ( $\alpha=.81$ ), and teammates ( $\alpha=.78$ ).



**Communication Tools.** The last section of the survey measured how frequently participants use various communication tools. Athletes were given a root question of “I communicate with my coach (interchangeable with parent/guardian, teammate, or friend) by...” and given six items to assess: calling, texting, emailing, Facebook, Twitter and talking in person. Participants rated each item with a five-point Likert Scale anchored by “not at all” (1) and “most often” (5).

## **Analysis**

Data were transferred from the administered paper questionnaires to the computer for analysis and storage. SPSS version 20 was used for all data analysis. In order to assess study hypotheses concerning potential gender variation in motivation, independent t-tests were conducted. This was used to evaluate significant differences between genders in mass media, interpersonal motivation sources, motivation levels and communication tools used. In order to examine the research questions and hypotheses, the Pelletier et al. (1995) Sports Motivation Scale for measurement of motivation from interpersonal sources was used to structure the nine-item scale used for this study. The nine-item scale was used to determine the levels of motivation from various interpersonal sources. To compare highly versus lowly motivated athletes a dichotomous variable was created. A median split technique was used to divide highly versus lowly motivated athletes. The median was found for each variable (parent, coach, teammate, and friend) and split into highly and lowly motivated athletes. This allowed for the study to compare two groups using a t-test for significant differences.

## Chapter 4: Results

The analytic sample consisted of 110 student-athletes from the University of the Pacific. Seventy-six percent of athletes were White, nine percent were African-American, six percent Hispanic-American, three percent were Asian-American, and six percent listed their ethnicity as 'other'. The mean age was 19-years-old. Respondents were 57% (63) female 43% (47) male.

### Athlete Motivation

There were two measures of motivation used to answer Research Question One: *“What interpersonal communication sources are most influential for student athletes’ motivation in sports?”* First, a general measurement was used to determine how much interpersonal sources motivate each respondent. Parents ( $M=4.57$   $SD=0.65$ ), teammates ( $M=4.45$   $SD=0.67$ ), and coaches ( $M=4.30$   $SD=0.92$ ) showed strong importance in motivating athletes, while friends who were non-teammates had less influence ( $M=3.53$   $SD=1.20$ ) (see Figure 1). Parents, teammates and coaches had low standard deviation because respondents’ answers were very close to the mean suggesting responses were consistent amongst athletes. Friends recorded a higher standard deviation because respondents’ answers were more spread out in relation to the mean.

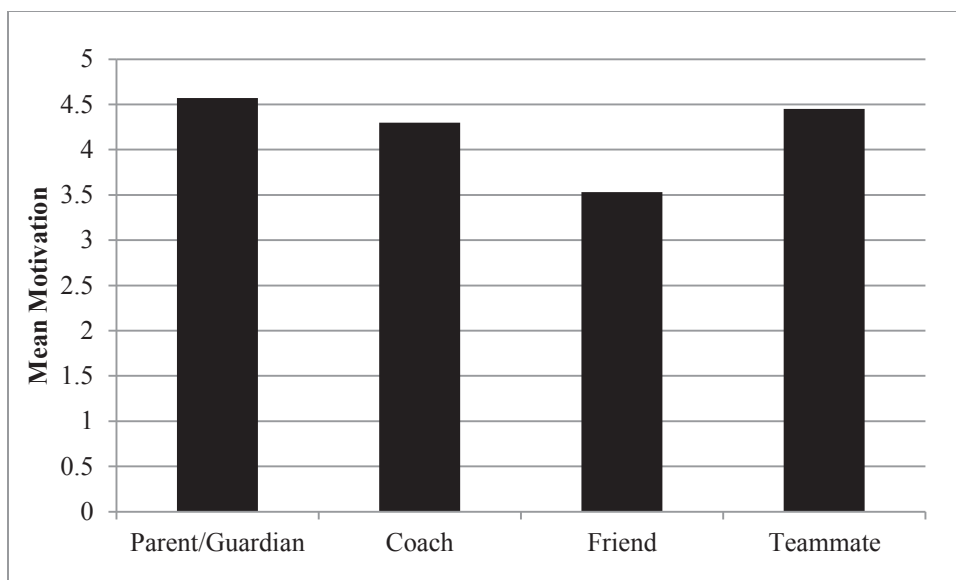


Figure 1. Motivational Impact of Interpersonal Sources

Second, to evaluate sports motivation specifically, various sports-related circumstances were used to gauge how motivational parents/guardians, coach, friends (who are non-teammates), and current teammates were to student-athletes under specific circumstances. This allowed for a more in-depth measurement of the overall motivation from each interpersonal source (see Figure 2). The data suggest that these values reflect the general motivation scale. Results indicate parents ( $M=3.94$   $SD=0.72$ ) were the highest contributors towards athletes' motivation. Teammates ( $M=3.91$   $SD=0.65$ ) were also high motivators for athletes with only a slightly lower mean score compared to parents. Coaches ( $M=3.44$   $SD=0.67$ ) were slightly motivating while friends ( $M=3.09$   $SD=0.79$ ) were the least motivating for athletes.

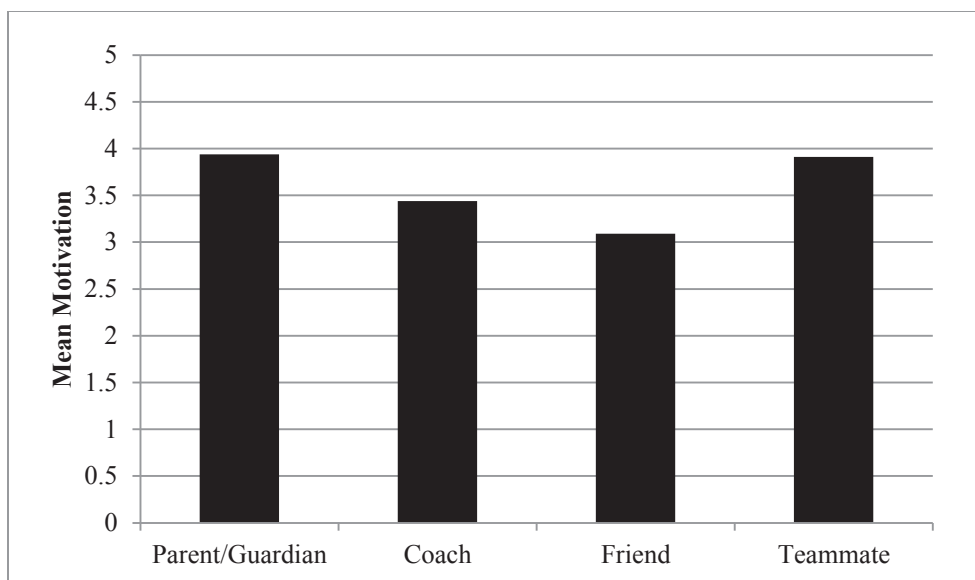


Figure 2. Sport Motivation Scale of Interpersonal Sources

Mass media and social media were evaluated through Research Question Two: “*What mediated communication sources are most influential for student athletes’ motivation in sports?*” Six items measured mass media influence and showed relatively low importance for all except one. As Figure 3 shows, sports on television ( $M=3.94$   $SD=1.21$ ) was somewhat motivating to athletes but sports-related websites ( $M=3.28$   $SD=1.30$ ), sports-related magazines ( $M=3.23$   $SD=1.35$ ), sports-related phone radio ( $M=3.13$   $SD=1.28$ ), sports-related phone apps ( $M=2.94$   $SD=1.25764$ ), and sports-related video games ( $M= 2.64$   $SD=1.22$ ) had little impact.

Social media were assessed with 13 items that measured Twitter, Facebook, and YouTube. Results suggest that social media have little influence on athletic motivation. Social media had much less impact on athletes’ motivation with mean scores ranging from 1.35 to 2.69 on a five-point scale.

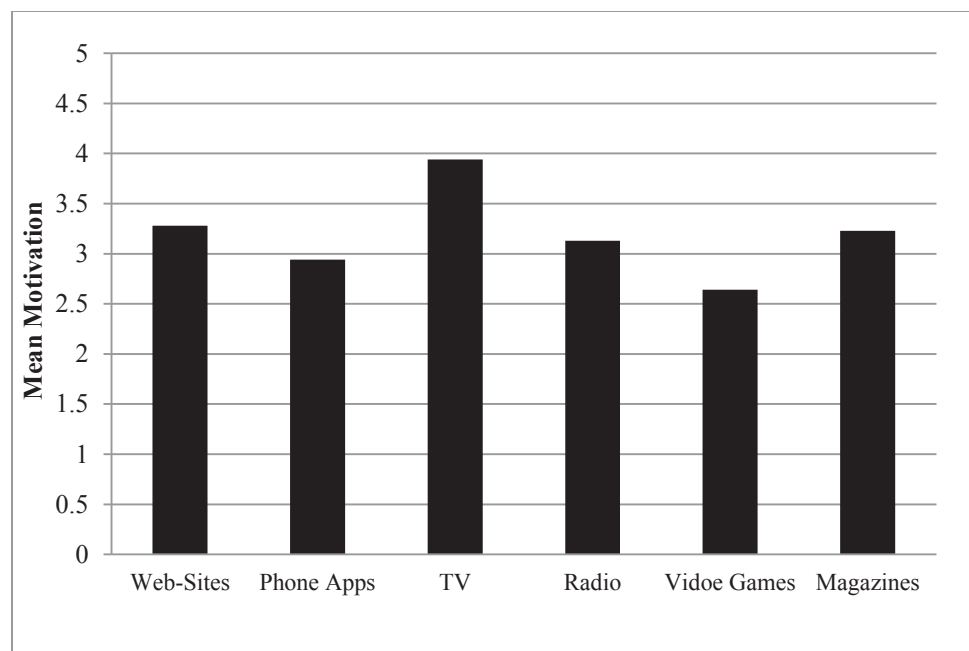


Figure 3. Media Motivating Effects

### Gender Differences

Research Question Three asked: “*Is there a gender difference in mediated communication influences for student athletes’ motivation in sports?*” As Table 1 shows, there were significant gender differences in mass media influences for student athletes’ motivation in sports. Males were significantly more likely to find motivation from sports on television (3.94 versus 3.35,  $t(108) = 2.49$ ,  $p < .05$ ), sports-related websites (3.28 versus 2.70,  $t(108) = 2.54$ ,  $p < .05$ ), sports-related magazines (3.23 versus 2.27,  $t(108) = 3.95$ ,  $p < .001$ ), sports-video games (3.13 versus 2.08,  $t(108) = 5.19$ ,  $p < .001$ ), sports-related phone applications (2.94 versus 2.29,  $t(108) = 2.68$ ,  $p < .01$ ), and sports on radio (2.64 versus 1.54,  $t(108) = 4.62$ ,  $p < .001$ ). As previously reported, social media were not an integral part of athlete motivation and independent t-tests showed no significant difference between the two groups.

Table 1. Comparison of Mass Media Motivation on Gender

Media Source	Mean (Male)	Mean (Female)	df	<i>t</i> -test
Sports-related web sites	3.28	2.70	108	2.54*
Sports-related phone apps	2.94	2.29	108	2.68**
Sports on Television	3.94	3.35	108	2.48*
Sports on Radio	3.13	2.08	108	4.62***
Sports Video Games	2.64	1.54	108	5.19***
Sports-related magazines	3.23	2.27	108	3.95***

---

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

---

A *t*-test was also used to determine whether there was a significant difference between men and women regarding their sports-related motivation from interpersonal sources. The study supports Hypothesis One suggesting female athletes rely more on their intimate relationships than male athletes for motivational support (see Table 2). Females are more likely to seek motivational support from parents (4.57 versus 3.79,  $t(108) = 4.76$ ,  $p < .001$ ) and friends (3.16 versus 2.71,  $t(108) = 2.44$ ,  $p < .05$ ) than males. Findings also supported Hypothesis Two, suggesting males were more likely than females to seek motivational support from their coaches (3.10 versus 2.72,  $t(108) = 2.14$ ,  $p < .05$ ).

Table 2. Comparison of Motivation on Gender

	Mean (Male)	Mean (Female)	df	t-test
Motivation Source				
Parent/Guardian	3.79	4.53	108	4.76***
Coach	3.10	2.72	108	2.14*
Friend	2.71	3.16	108	2.44*
Teammate	3.52	3.52	108	-0.04
* indicates p-values <0.05, ** p<0.01, *** p<0.001				

### Highly versus Lowly Motivated Athletes

Hypothesis Three states “*Highly motivated athletes will use communication tools more often for motivational support with their interpersonal sources than will less motivated athletes.*” Significant differences were found between highly and lowly motivated athletes across a variety of communication tools, supporting Hypothesis Three. Highly motivated athletes were more likely to call (4.70 versus 4.27,  $t(108) = 3.57$ ,  $p < .01$ ) and connect with parents on Facebook (1.82 versus 1.40,  $t(108) = 1.94$ ,  $p < .05$ ) (see Table 3). Additionally, highly motivated athletes were more likely to call (4.25 versus 3.76,  $t(108) = 2.44$ ,  $p < .05$ ), text (4.82 versus 4.61,  $t(108) = 2.13$ ,  $p < .01$ ) and email (2.57 versus 1.74,  $t(108) = 3.07$ ,  $p < .001$ ) their friends, as well as call (4.20 versus 3.65,  $t(108) = 2.71$ ,  $p < .01$ ), text (4.86 versus 4.57,  $t(108) = 2.81$ ,  $p < .001$ ) and talk in person (4.93 versus 4.87,  $t(108) = 1.01$ ,  $p < .05$ ) with their teammates.

Table 3. Significant Differences of Athlete Communication Tool Usage by High versus Low Motivation Across Interpersonal Connections

Communication Tools	High Motivation (Mean)	Low Motivation (Mean)	df	t-test
<b>Parent</b>				
Calling	4.70	4.27	108	-3.57**
Facebook	1.82	1.40	108	-1.94*
<b>Friend</b>				
Calling	4.25	3.76	108	-2.44*
Texting	4.82	4.61	108	-2.13***
Emailing	2.57	1.74	108	-3.07***
<b>Teammate</b>				
Calling	4.20	3.65	108	-2.71**
Texting	4.86	4.57	108	-2.81***
In Person	4.93	4.87	108	-1.01*

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

### Communication Tools

Research Question Three asked “*Which communication tools were more frequently used by athletes for motivational support with their interpersonal sources?*”

While there was some variation in the tools preferred with each interpersonal source, texting and talking in person emerged as tools used consistently by athletes across interpersonal sources. Results indicated that calling ( $M=4.48$   $SD=.65$ ) and texting ( $M=4.16$   $SD=1.06$ ) were most preferred with parents. Talking in person ( $M=4.61$   $SD=0.91$ ) and texting ( $M=3.71$   $SD=1.10$ ) were most preferred with coaches. Talking in person ( $M=4.27$   $SD=1.07$ ) and texting ( $M=4.72$   $SD=0.53$ ) were most common with friends. Talking in person ( $M=4.9$   $SD=0.30$ ) and texting ( $M=4.72$   $SD=0.54$ ) were overwhelmingly chosen with teammates (see Figure 4).



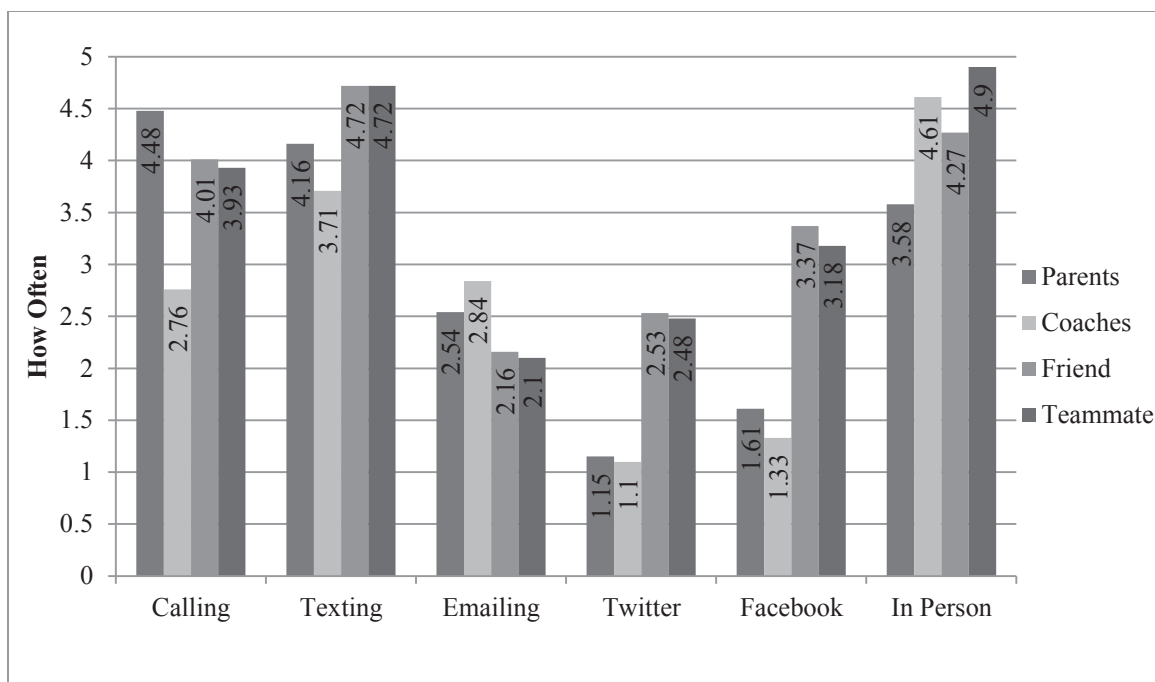


Figure 4. Communication methods used with interpersonal sources

Respondents also reported how often they communicated with parents/guardians, coaches, friends and teammates using various communication methods. Analyses showed that social media were important for peer-to-peer communication, while calling was important with parents, and email was preferred with coaches. On average, athletes communicated with teammates seven days per week, while they communicated with coaches, parents, and friends five days per week.

## Chapter 5: Discussion

In this study, student-athlete motivation was measured by using communication ecology as a framework for identifying connections with interpersonal sources. These connections contribute towards the purposes of attaining their athletic performance goals. Additionally, the media's impact on athlete motivation was also evaluated. Until now there has been no investigation which examines the relationship between athletes' communication ecologies and their motivation towards their athletic performance goals. This study represents a first step in filling this gap.

***Athlete Motivation.*** The findings from this study indicate that parents and teammates provide athletes with the most motivation for athletic performance. The Sports Motivation Scale, which measured motivation as it relates specifically to sports indicated that athletes favor their parents and teammates, while coaches were found to be less influential. However, along with parents and teammates, a general measurement of motivation showed coaches as a high motivator for athletes. This discrepancy may be due to the fact that the Sport Motivation Scale measured social support more so than the general motivation measurement. Therefore, athletes may seek social support more often from intimate relationships rather than their coach, yet their coach is still a motivating influence on the athletes.

This study also found that mass media, specifically television, have effects on male athletes' motivation, but not female athletes' motivation. Sports on television was

identified as the only mass medium item that motivated male athletes. Similarly, results from social media measurements indicate that social media have no effect on male or female athlete motivation.

***Gender Differences.*** Research Question Four sought to identify gender differences in media influences for athletes' motivation in sports. While there was no significant difference between genders for social media, there were gender differences related to mass media. The findings indicated that males were more motivated than females by mass media, these included: sports-related websites, sports-related phone applications, sports on television, sports-video games, sports on radio and sports-related magazines. This difference may be due to the popularity of professional male sports and the great amount of media attention they receive. This popularity allows for a greater number of professional male athletes to act as role models for amateur athletes. The lack of gender differences related to social media reflects their overall low motivating influence for athletes.

Hypothesis One predicted female athletes will rely more on their intimate relationships than male athletes for motivational support. The findings support the hypothesis indicating that female athletes find more motivation from parents and friends than do males. This finding supports the literature that females seek more emotional support and emphasize intimacy and self-disclosure more with their friends and family. Hypothesis Two was also supported, indicating that male athletes rely more on their coaches than do females for motivational support. This is consistent with the literature that men find more motivational support from their coaches. This may be because male

athletes find motivation more through coaches' evaluation of their performances than do female athletes.

***Highly versus Lowly Motivated Athletes.*** Hypothesis Three stated that highly motivated athletes will speak more often with their interpersonal sources than less motivated athletes. Data from the study supported the hypothesis indicating that highly motivated athletes speak more often with parents, coaches, friends and teammates than lowly motivated athletes. Highly motivated athletes were more likely to call and connect with parents on Facebook and lowly motivated athletes were more likely to connect with parents on Twitter. However, Facebook and Twitter communication were not used very often by either highly or lowly motivated athletes. Highly motivated athletes were also more likely to connect with coaches on Twitter but generally this medium was not often used. Additionally, highly motivated athletes were more likely to call and text friends and teammates than lowly motivated athletes. Emailing friends was also more likely with highly motivated athletes but not often used. Overall, the findings suggest that highly motivated athletes have stronger relationships with their intimate relationships. Highly motivated athletes use their communication tools more frequently for motivation than lowly motivated athletes. Highly motivated athletes may feel it is necessary to communicate often with interpersonal sources in order to stay motivated; however, more research is needed to better understand this association.

***Communication Tools.*** Findings from the communication tool measurements showed differences in athlete communication preferences across interpersonal sources. Calling and texting were preferred by athletes with their parents. This finding might be

explained by considering athletes are away at college and this is the most direct form of communication with their parents/guardians. Athletes preferred speaking with their coaches in person or through text messages. Communication is most often experienced at practice or during events where both athletes and coaches are present. Email was most preferred with coaches over other interpersonal sources. Several communication tools were favored with friends, including, calling, texting and talking in person. Additionally, athletes preferred texting and talking in person with their teammates. Social media was used with peer-to-peer communications. Texting was preferred with all interpersonal sources, but may carry different implications for why it is preferred with different sources. The use of texting may be more social amongst friends and teammates, but more informative for parents and coaches. Intimate relationships saw more phone calls because voice communication may allow access to intimate sources for verbal social support.

### **Implications**

This thesis reveals practical implications for the mapping of motivation through using athlete communication ecology as a foundation. The findings suggest the importance of both media and interpersonal sources on athletic motivation. However, media were particularly influential with men, while interpersonal sources, such as family and friends were more influential with women. This suggests that female athletes should be encouraged to maintain connection with their intimates during their sport season to help them reach their athletic goals. This also suggests that sports influence from professional sports through mass media helps males with motivation. Data from highly and lowly motivated athletes showed differences in communication tool preferences with

interpersonal sources. Sports teams can benefit from understanding which sources are most influential for their athletes, and utilize or seek to improve the best available communication channels.

### **Limitations**

Limitations of the study include a sample that includes more female than male athletes. This is due in part to the University of the Pacific Athletics having more female than male sports. The sample includes student-athletes enrolled at a small NCAA Division 1 university. Results may differ for larger universities with larger student-athlete population. Several athletic teams did not have full team participation in the study. Full participation from all athletic teams would allow for team-to-team communication ecology comparisons. Moreover, the majority of the sample was white and findings may differ with other samples.

### **Conclusion and Directions for Future Research**

This study represents an integral step in building a comprehensive understanding of important motivational sources for student-athletes. Student-athletes are under unique pressures to perform well both academically and athletically and as the season progresses, it is important to keep athletes motivated. Future research should continue examining the athletic communication ecology through continued survey and observation. Longitudinal studies should be conducted to measure the effectiveness of athlete communication ecologies throughout their college careers. This approach would allow athletic departments to more effectively motivate their team members, which is important because successful sports programs create value in a college athletic program.

These analyses would complement the results of the work reported here, and would produce additional insights into the motivational changes of athletes during their tenure at their college or university. Future research is also needed to further explore gender differences in college athletics and the impact social support, coaching styles and the sports environment have on gender differences in athletic motivation. Further research investigation of college athlete participation in social media would benefit future research on how it directly effects their motivation in sports.

## References

- Allison, M. (2005). Gecyberschaft: A theoretical model for the analysis of emerging electronic communities. *Dissertation Abstracts International*, 65 (11A), 4366 (UMI No. 3155725)
- Altheide, D.L. (1994). An Ecology of Communication: Toward a Mapping of the Effective Environment. *The Sociological Quarterly*, Vol. 35, No. 4, pp. 665-683
- Ames, C. (1992). Achievement goals, motivational climate and motivational processes. In G.C.Roberts (Ed.), *Motivation in sport and exercise* (pp. 161-176), Champaign, IL: Human Kinetics.
- Amorose, A.J., & Horn, T.S. (2000). Intrinsic motivation: Relationships with collegiate athletes' gender, scholarship status and perceptions of their coaches' behavior. *The Spanish Journal of Psychology*, 22, 63-84.
- Ashe, Diane D.; Lynn E. McCutcheon (2001). "Shyness, Loneliness, and Attitude Towards Celebrities". *Current Research in Social Psychology* 6 (9).
- Auter, P. J. (2007). Portable social groups: Willingness to communicate, interpersonal communication gratifications, and cell phone use among young adults. *International Journal of Mobile Communications*, 5(2), 139–156
- Ball-Rokeach, S.J., Wilkin, H.A., Mastaganis, M.D., Cheong, P.H.(2007). Comparing the Communication Ecologies of Geo-Ethnic Communities: How People Stay on Top of Their Community. *The Electronic Journal of Communication*, 17, 1-2.



- Ball-Rokeach, S.J., Rokeach, M., & Grube, J.W. (1984). *The Great American Values Test: influencing Behavior and Belief Through Television*. New York: Free Press.
- Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review*, 84(2), 191-215.
- Baric, Renata., Bucik, Valentin. (2009). Motivational differences in athletes trained by coaches of different motivational and leadership profiles. *Kinesiology*, 41(2009)2:181-194
- Beam, J.W., Serwatka, T.S., & Wilson, W.J. (2004). Preferred leadership of NCAA Division 1 and II intercollegiate student-athletes. *Journal of Sport Behavior*, 27, 3-15.
- Bell, R. R. *Worlds of friendship*. Beverly Hills, CA: Sage, 1981.
- Bianco, T., & Eklund, R.C. (2001). Conceptual considerations for social support research in sport and exercise settings: the case of the sports injury. *Journal of Sport & Exercise Psychology*, 23, 85-107.
- Borae, Jin. Park, Namkee. (2010) In-Person Contact Begets Calling and Texting: Interpersonal Motives for Cell Phone Use, Face-to-Face Interaction, and Loneliness. *Cyberpsychology, behavior, and social networking*, 13 (6), 611-618.
- Brown, W.J., Basil, M.D., & Bocarnea, M.C. (2003). The influence of famous athletes on health benefits and practices: Mark McGwire, child abuse prevention, and androstenedione. *Journal of Health Communication*, 8, 41-57.
- Castells, M. (2001). Virtual Communities or Network Society? In *The Internet Galaxy: Reflections on the Internet, Business, and Society* (pp. 116-136). Oxford: Oxford University Press.

- Chelladurai, P. (1990). Leadership in Sports: A review. *International Journal of Sports Psychology*, 21, 328-354.
- Chelladurai, P. (1978). A Contingency Model of Leadership in Athletics. Unpublished doctoral dissertation. University of Waterloo, Waterloo, Ontario, Canada.
- Chelladurai, P., & Arnott, M. (1985). Decision styles in coaching: Preferences of basketball players. *Research Quarterly for Exercise and Sport*, 56(1), 15-24.
- Chelladurai, P. Haggerty, T.R., & Baxter, P.R. (1989). Decision style choices of university basketball coaches and players. *Journal of Sport and Exercise Psychology*, 11, 201-215.
- Chelladurai, P. (1990). Leadership in sports: A review. *International Journal of Sports Psychology*, 21, 328-354.
- Collins, K., & Barber, H. (2005). Female athletes' perceptions of parental influences. *Journal of Sport Behavior*, 28, 295-314.
- Deci, E.L., & Ryan, R.M. (2000). The “what” and “why” of goal pursuits: human needs and the self-determination theory. *Psychological Inquiry*, 11, 227-268.
- Deutsch, F. M., & Mackesy, M. E. (1985). Friendship and the development of self schemas: The effects of talking about others. *Personality and Social Psychology Bulletin*, 11, 399-408
- Duda, J. (2001). Achievement goal research in sport: pushing the boundaries and clarifying some misunderstandings. In G.C. Roberts (ed.), *Advances in motivation sport and exercise*, 129-182. Champaign, IL: Human Kinetics

- Duda, J.L., & Balaguer, I. (2007). The coach-created motivational climate. In S. Jowett & D. Lavallee (Eds.), *Social psychology of sport*, 117-130. Champaign, IL: Human Kinetics.
- Eccles, J., Wigfield, A., & Schiefele, U. (1998). Motivation to succeed. In W. Damon & N. Eisenberg (Eds.), *Handbook of child psychology* 5, (3) 1017–1095. Hoboken, NJ: John Wiley & Sons.
- Eyal, K., & Cohen, J. (2006). When good friends say goodbye: A parasocial breakup study. *Journal of Broadcasting & Electronic Media*, 50, 502-523.
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology*, 95, 148–162.
- Grolnick, W. S., & Ryan, R. M. (1992). Parental resources and the developing child in school. In M. Procidano & C. Fisher (Eds.), *Contemporary families: A handbook for school professionals*, 275–291. New York, NY: Teachers College Press.
- Goldsmith, D.J. (2004). *Communicating social support*. New York: Cambridge University Press.
- Gould, D., Whitley, M.A. (2009). Sources and consequences of athletic burnout among college athletes. *Journal of Intercollegiate Sports*, 2, 16-30.
- Greenglass, E. R. (1982). A world of difference: Gender roles in perspective. *Toronto: Wiley*.
- Hearn, G., Forth, M. (2007) Networked Individualism of Urban Residents: Discovering the communicative ecology in inner-city apartment buildings. *Information, Communication & Society*, 10(5), 749-772.

- Henderson, A. T., and Berla, N. (1994). A New Generation of Evidence: The Family is Critical to Student Achievement. *National Committee for Citizens in Education*, Columbia, MD.
- Hinduja, S. & Patchin, J. (2008). Personal information of adolescents on the internet: A quantitative analysis of MySpace. *Journal of Adolescence*, 31. 125-146.
- Hoffner, C. (1996). Children's wishful identification and parasocial interaction with favorite television characters. *Journal of Broadcasting & Electronic Media*, 40, 389-402.
- Hoffner, C., & Cantor, J. (1991). Perceiving and responding to mass media characters. In J. Bryant & D. Zillman (eds.), *Responding to the screen: Reception and reaction processes*, 63-101. Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.
- Hofstede, G. (2001). Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations. *Journal of Broadcasting & Electronic Media*, 123) 112-123.
- Horton, D., & Wohl, R.R. (1956). Mass communication and parasocial interactions with favorite television characters. *Journal of Broadcasting & Electronic Media*, 40, 389-402.
- Huitt, W. (2011). Motivation to learn: An overview. *Educational Psychology Interactive*. University of the Pacific. Retrieved April 2nd, 2013 from <http://www.edpsycinteractive.org/topics/motivation/motivate.html>
- Jin, S., & Park, N. (2009). Parasocial interaction with my avatar: Effects of interdependent self-construal and the mediating role of self-presence in an avatar

- based console game. Wii. *Cyberpsychology, Behavior, and Social Networking*, 12, 723-727.
- Joesaar, Helen., Hein, Vello., Hagger, Martin. (2012). Young athletes' perception of autonomy support from the coach, peer motivational climate and intrinsic motivation in sport setting: One-year effects. *Psychology of Sport and Exercise*, 13, 257-262.
- Jowett, S., & Chaundry, V. (2004). An investigation into the impact of coach leadership and coach-athlete relationship on group cohesion. *Group Dynamics: Theory, Research and Practice*, 8(4), 302-311.
- Keegan, R.J., Harwood, C.G., Spray, C.M. & Lavalley, D.E. (2009). A qualitative investigation exploring the motivational climate in early career sports participants: coach, parent and peer influences on sport motivation. *Psychology of Sport and Exercise*, 10, 362-372.
- Kessler, R. C., McLeod, J. D., & Wethington, E. (1985). The costs of caring: A perspective on the relationship between sex and psychological distress. In I. G. Sarason & B. R. Sarason (Eds.), *Social Support: Theory, research and applications*. Dordrecht, The Netherlands: Martinus Nijhoff, 1985.
- Kepuladze, T.A. (2010). Gender stereotypes and gender feature of job motivation: differences or similarity? *Problems and Perspectives in Management*, 8 (2).
- Larsen, K. S., Martin, H. J., Ettinger, R. H., & Nelson, J. (1976). Approval seeking social cost, and aggression: A scale and some dynamics. *The Journal of Psychology*, 94, 3-11.

- Maccoby, E. E. *The development of sex differences*. (1966) Stanford, CA: Stanford University Press, 1966.
- Mangold, W., Faulds, D., (2009). Social media: The new hybrid element of the promotion mix. *Business Horizons* 52(4), 357-365.
- Mathes, S.A., Battista, B.M. (1985). College men's and women's motives for participation in physical activity. *Perceptual and Motor Skills*, 61, 719-726
- McDermott, R. and Snyder, W.M., (2002). Cultivating Communities of Practice. *Harvard Business School Press*, Boston, MA.
- Mesch, G. S., & Levanon, Y. (2003). Community Networking and Locally-Based Social Ties in Two Suburban Localities. *City and Community*, 2(4), 335-351.
- Pew Research Center. (2010). Cell Phone Usage hits 91%. [www.pewresearch.org](http://www.pewresearch.org). Retrieved from <http://www.pewresearch.org/fact-tank/2013/06/06/cell-phone-ownership-hits-91-of-adults/> on June 5, 2013.
- Pomerantz, J. R. & Portillo, M.C. (2012). Emergent Features, Gestalts, and Feature Integration Theory. J. Wolfe & L. Robertson (Eds.), *From Perception to Consciousness: Searching with Anne Treisman*, 187-192. New York: Oxford University Press.
- Regan, P., & Steeves, V. (2010). Kids r us: Online social networking and the potential for empowerment. *Surveillance and Society*, 8, 151–165.
- Reimer, H.A., & Toon, K. (2001). Leadership and Satisfaction in tennis: Examination of congruence, gender and ability. *Research quarterly for Exercise and Sport*, 72(3), 243-256.

Ross, C., Orr, E. S., Sisic, M., Simmering, M. G., Arseneault, J. M., & Orr, R. (2009).

The influence of shyness on the use of Facebook in an undergraduate sample.

*CyberPsychology and Behaviour*, 4(3) 123-198.

.Rubin, R.B., & McHugh, M.P.(1987). Development of parasocial interactions

relationship, and local television news viewing. *Human Communication research*,

12, 155-80.

Sage, G.H. (1980). Orientations toward sport of male and female intercollegiate athletes.

*Journal of Sports Psychology*, 2, 355-362.

Sheldon, Kennon M., Abad, Neetu., Hinsch, Christian. (2011). A two-process view of

Facebook use and relatedness need-satisfaction: Disconnection drives use, and

connection rewards it. *Psychology of Popular Media Culture*, 1(S), 2-15.

Stefanone Michael A., Lackaff, Derek., Rosen, Devan. (2010). Relationship between

Traditional Mass Media and “Social Media”: Reality Television as a Model for

Social Network Site Behavior. *Journal of Broadcasting & Electronic Media*

54(3), 2010, pp. 508–525.

Uchino, B.N. (2004). Social Support and physical health: Understanding the health

consequences of relationships. New Haven, CT: Yale University Press.

Terry, P.C., (1984). The coaching preferences of athletes at Universiade '83. *The*

*Canadian of Applied Sports Sciences*, 9, 201-208.

Terry, P.C., Howe, B.L. (1984). The coaching preferences of athletes. *The Canadian of*

*Applied Sports Sciences*, 9, 188-193.

Turner, T., Qvarfordt, P., Biehl, J.Tl, Golovchinsky, G., & Back, M. (2010). Exploring

the workplace communication ecology. CHI 2010, April 10-15.

- Valkenburg, P. M., & Peter, J. (2010). Online communication among adolescents: An integrated model of its attraction, opportunities, and risks. *Journal of Adolescent Health, 48*, 121-127
- Vallerand, R.J., & Pelletier, L.G. (1985). On the casual effects of positive and negative feedback on males' and females' intrinsic motivation. *Canadian journal of Behavioral Sciences, 20*, 239-250.
- Vazou, S., Ntoumanis, N., & Duda, J.L. (2006). Predicting young athletes' motivational indices as a function of their perceptions of the coach- and peer-created climate. *Psychology of Sport and Exercise, 7*, 215-233.
- Verbrugge, L. M., & Wingard, D. L. (1987). Sex differences in health and mortality. *Women and Health 12*, 103-145.
- Vieira, Edward T., Jr, Grantham, Susan. (2009). Antecedent Influences on Children's Extrinsic Motivation to Go Online. *Journal of Applied Social Psychology, 39*(3), 707-733.
- Wenger, E., McDermott, R., and Snyder, W. (2002). A guide to managing knowledge: Cultivating communities of practice. Boston: *Harvard Business School Press*.
- Wheeler, L. & Nezlek, J. Sex differences in social participation. (1977). *Journal of Personality and Social Psychology, 35*, 742-754.
- Williams, L. (1996). *Situational and contextual influences on goal orientations*. Microfilm Publications, University of Oregon, Institute for Sport & Human Performance. Retrieved March 24<sup>th</sup>, 2013 from <http://pacific.edu>.



## APPENDIX A

## Athlete Motivation Questionnaire

Thank you for taking the time to complete the survey. Your views are important to the researchers, and your participation is essential to the completion of this study. Please answer the following questions as truthfully as possible. All information collected is confidential and anonymous. If you have any questions regarding this study, please contact Tye Davis at [tdavis1@pacific.edu](mailto:tdavis1@pacific.edu) or (530) 237-7186. Thank You!

### Part A

On a scale of 1 to 5, where 1 is not important and 5 is very important, how important are the following **people** in motivating you in sports?

**How important are each of the following in motivating you?**

	Not at All	Very Little	Neutral	Somewhat	Very Much
Your parents/guardians	1	2	3	4	5
Your current coaches	1	2	3	4	5
Your friends (non-teammates)	1	2	3	4	5
Your teammates	1	2	3	4	5

On a scale of 1 to 5, where 1 is not important and 5 is very important, how important are the following **media** in motivating you in sports?

**How important are each of the following in motivating you?**

	Not at All	Very Little	Neutral	Somewhat	Very Much
Sports-related web sites	1	2	3	4	5
Sports-related phone apps	1	2	3	4	5
Sports on Television	1	2	3	4	5
Sports on the Radio	1	2	3	4	5
Sports Video Games	1	2	3	4	5
Sports-related Magazine	1	2	3	4	5

**Part B**

Please rate your agreement with the following questions that best represent you as an athlete.  
Please circle the appropriate number.

<b><u>If I play poor in a game I talk to:</u></b>	<b>Completely Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Completely Agree</b>
My <b>parents /guardians</b> about my performance	1	2	3	4	5
My <b>coach</b> about my performance	1	2	3	4	5
My <b>friends (non-teammate)</b> about my performance	1	2	3	4	5
My <b>teammates</b> about my performance	1	2	3	4	5

<b><u>When I become exhausted from my sport, I talk to:</u></b>	<b>Completely Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Completely Agree</b>
My <b>parents /guardians</b> about how I feel	1	2	3	4	5
My <b>coach</b> about how I feel	1	2	3	4	5
My <b>friends (non-teammate)</b> about how I feel	1	2	3	4	5
My <b>teammates</b> about how I feel	1	2	3	4	5

<b><u>When I'm upset with my team's performance, I talk to:</u></b>	<b>Completely Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Completely Agree</b>
My <b>parents /guardians</b> about my concerns	1	2	3	4	5
My <b>coach</b> about my concerns	1	2	3	4	5
My <b>friends (non-teammate)</b> about my Concerns	1	2	3	4	5
My <b>teammates</b> about my concerns	1	2	3	4	5

<u><b>When I play great in a game, I tell:</b></u> <b>Agree</b>	<b>Completely Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Completely</b>
--------------------------------------------------------------------	--------------------------------	------------------------------	----------------	---------------------------	-------------------

My <b>parents /guardians</b> about my performance	1	2	3	4	5
---------------------------------------------------	---	---	---	---	---

My <b>coach</b> about my performance	1	2	3	4	5
--------------------------------------	---	---	---	---	---

My <b>friends (non-teammate)</b> about my performance	1	2	3	4	5
-------------------------------------------------------	---	---	---	---	---

My <b>teammates</b> about my performance	1	2	3	4	5
------------------------------------------	---	---	---	---	---

<u><b>f I have a concern with a coach, I talk to:</b></u>	<b>Completely Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Completely Agree</b>
-----------------------------------------------------------	--------------------------------	------------------------------	----------------	---------------------------	-----------------------------

My <b>parents /guardians</b> about the situation	1	2	3	4	5
--------------------------------------------------	---	---	---	---	---

My <b>coach</b> about the situation	1	2	3	4	5
-------------------------------------	---	---	---	---	---

My <b>friends (non-teammate)</b> about the situation	1	2	3	4	5
------------------------------------------------------	---	---	---	---	---

My <b>teammates</b> about the situation	1	2	3	4	5
-----------------------------------------	---	---	---	---	---

<u><b>If I have difficulty with my sport, talking to:</b></u>	<b>Completely Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Completely Agree</b>
---------------------------------------------------------------	--------------------------------	------------------------------	----------------	---------------------------	-----------------------------

My <b>parents /guardians</b> makes me feel better	1	2	3	4	5
---------------------------------------------------	---	---	---	---	---

My <b>coach</b> makes me feel better	1	2	3	4	5
--------------------------------------	---	---	---	---	---

My <b>friends (non-teammate)</b> makes me feel better	1	2	3	4	5
-------------------------------------------------------	---	---	---	---	---

My <b>teammates</b> makes me feel Better	1	2	3	4	5
------------------------------------------	---	---	---	---	---

<b><u>Playing sports is one of the best ways to maintain a relationship with:</u></b>	<b>Completely Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Completely Agree</b>
My parents /guardians	1	2	3	4	5
My coach	1	2	3	4	5
My friends (non-teammate)	1	2	3	4	5
My teammates	1	2	3	4	5

<b><u>Sports allow me to be well regarded by:</u></b>	<b>Completely Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Completely Agree</b>
My parents /guardians	1	2	3	4	5
My coach	1	2	3	4	5
My friends (non-teammate)	1	2	3	4	5
My teammates	1	2	3	4	5

<b><u>If I need advice on how to improve my sports skills, I ask:</u></b>	<b>Completely Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Completely Agree</b>
My parents /guardians	1	2	3	4	5
My coach	1	2	3	4	5
My friends (non-teammate)	1	2	3	4	5
My teammates	1	2	3	4	5

**Part C**

Please rate your agreement with the following questions that best represent your social media participation. Please circle the appropriate number.

	<b>Completely Disagree</b>	<b>Somewhat Disagree</b>	<b>Neutral</b>	<b>Somewhat Agree</b>	<b>Completely Agree</b>
I post about my current sports team on <b>Twitter</b>	1	2	3	4	5
I post about my current sports team on <b>Facebook</b>	1	2	3	4	5
I post about my current sports team on <b>YouTube</b>	1	2	3	4	5
If I need to improve a sport skill, I look on <b>YouTube</b> for video tutorials	1	2	3	4	5
When I play poor in a game, I post about my performance on <b>Facebook</b>	1	2	3	4	5
When I play poor in a game, I post about my performance on <b>Twitter</b>	1	2	3	4	5
When I play great in a game, I post about my performance on <b>Facebook</b>	1	2	3	4	5
When I play great in a game, I post about my performance on <b>Twitter</b>	1	2	3	4	5
Sports allow me to be well regarded by my followers on <b>Twitter</b>	1	2	3	4	5
Sports allow me to be well regarded by my friends on <b>Facebook</b>	1	2	3	4	5
If I need motivation for my sport, I look to professional athletes on <b>Facebook</b>	1	2	3	4	5
If I need motivation for my sport, I look to professional athletes on <b>Twitter</b>	1	2	3	4	5
If I need motivation for my sport, I look to professional athletes on <b>YouTube</b>	1	2	3	4	5

**Part D**

Using the scale below, please indicate how you communicate with the following people listed.

I communicate with my  
parents by...

	<b>Not at All</b>	<b>Sometimes</b>	<b>Occasionally</b>	<b>Often</b>	<b>Most Often</b>
<i>Calling</i>	1	2	3	4	5
<i>Texting</i>	1	2	3	4	5
<i>Emailing</i>	1	2	3	4	5
<i>Twitter</i>	1	2	3	4	5
<i>Facebook</i>	1	2	3	4	5
<i>Talking in Person</i>	1	2	3	4	5

I communicate with my  
coach by...

	<b>Not at All</b>	<b>Sometimes</b>	<b>Occasionally</b>	<b>Often</b>	<b>Most Often</b>
<i>Calling</i>	1	2	3	4	5
<i>Texting</i>	1	2	3	4	5
<i>Emailing</i>	1	2	3	4	5
<i>Twitter</i>	1	2	3	4	5
<i>Facebook</i>	1	2	3	4	5
<i>Talking in Person</i>	1	2	3	4	5

I communicate with my  
friends(non-teammates) by...

	<b>Not at All</b>	<b>Sometimes</b>	<b>Occasionally</b>	<b>Often</b>	<b>Most Often</b>
<i>Calling</i>	1	2	3	4	5
<i>Texting</i>	1	2	3	4	5
<i>Emailing</i>	1	2	3	4	5
<i>Twitter</i>	1	2	3	4	5
<i>Facebook</i>	1	2	3	4	5
<i>Talking in Person</i>	1	2	3	4	5

I communicate with my  
teammates by...

	<b>Not at All</b>	<b>Sometimes</b>	<b>Occasionally</b>	<b>Often</b>	<b>Most Often</b>
<i>Calling</i>	1	2	3	4	5
<i>Texting</i>	1	2	3	4	5
<i>Emailing</i>	1	2	3	4	5
<i>Twitter</i>	1	2	3	4	5
<i>Facebook</i>	1	2	3	4	5
<i>Talking in Person</i>	1	2	3	4	5

**Part F**

1. What is your Gender? Male \_\_\_\_\_ Female \_\_\_\_\_
  
2. What is your ethnicity? (Check All That Apply)
  - 1) African American \_\_\_\_\_ 2) Caucasian \_\_\_\_\_ 3) Asian American \_\_\_\_\_
  - 4) Hispanic American \_\_\_\_\_ 5) Native American \_\_\_\_\_ 6) Other \_\_\_\_\_
  
3. What is your grade level? 1) Freshman \_\_\_\_\_ 2) Sophomore \_\_\_\_\_ 3) Junior \_\_\_\_\_  
 4) Senior \_\_\_\_\_ 5) Other \_\_\_\_\_
  
4. What is your age? \_\_\_\_\_
  
5. What is the primary sport that you play? \_\_\_\_\_
  
6. Do you have a favorite athlete?     **Yes**     **No**  
 If yes, who is the athlete: \_\_\_\_\_
  
7. On average, how many days per week do you communicate with the following people:  
 (Example: Coach:   6   *days*)  
 Coach: \_\_\_\_\_ *days*  
 Parent: \_\_\_\_\_ *days*  
 Friend (*non-teammate*): \_\_\_\_\_ *days*  
 Teammate: \_\_\_\_\_ *days*
  
8. On average, how many days per week do you:  
 Watch Sports on television: \_\_\_\_\_ *days*  
 Access Sports Apps on your phone: \_\_\_\_\_ *days*  
 Read Sports articles in a magazine/newspaper: \_\_\_\_\_ *days*  
 Access Sports Websites on the internet: \_\_\_\_\_ *days*  
 Listen to sports radio: \_\_\_\_\_ *days*



9. I have a Twitter Account:      Yes    No

10. I have a Facebook Account:      Yes    No

11. I have a YouTube Account:      Yes    No

**Thank You For Your Time!!**